Tree Biology - FOR 3342C – Section 2533 - Spring 2015 Syllabus

Instructors: Dr. Tim Martin (359 N-Z, 846-0866, tamartin@ufl.edu)  
Dr. John Davis (365 N-Z, 846-0879, jedavis@ufl.edu)  
Jennifer Lauture, Lab TA (jlauture@ufl.edu)

Office Hours: Before class on Wednesdays or by appt.; Otherwise,  
open door policy - If my office door is open and I'm not meeting with  
someone else, please feel free to drop in. I also check e-mail  
frequently.

Course web site: http://sfrc.ufl.edu/Courses/FOR3342/  
Lectures: Wednesday, Periods 2-3 (8:30 a.m. – 10:25 a.m.), 219  
Newins-Ziegler Hall  
Lab: Friday, 9:15 a.m. – 11:30 a.m., 219 N-Z

Objectives: Trees are complex biological systems. Resource  
managers who understand the biology of trees are better able to predict  
and control how forests respond to management. After completing this course, students will understand basic  
tree structure and function, how tree biology determines and constrains what managers can accomplish with  
forests, and how both human and environmental factors impact the biology of trees.

Academic Press, San Diego. 480 p. NOT Available at University Bookstore. You may purchase this text online  
from vendors such as Amazon.com. The Second Edition can probably also be obtained online new or used, and  
would be an acceptable reference, as well.

Lecture Outlines: Lecture outlines will be handed out at the beginning of each lecture. Lecture outlines will  
also be available for downloading from the course web site, usually by the evening before each lecture. You  
will need to obtain a password from the instructor to access these materials.

Evaluations and Expectations

Exams: There will be two non-comprehensive exams during the semester, and a comprehensive final exam  
administered on the officially scheduled final exam date for the class. Please plan ahead to attend all exams. Make-up  
exams will be given only under extreme circumstances.

Lab reports: A lab report will be due for each laboratory exercise, usually at the start of the following week's lab  
(see lecture schedule for exact due dates). No late lab reports will be accepted. The lowest lab report score will be  
dropped when calculating final grades.

Quizzes: Approximately 10 quizzes will be given covering information from recent lectures. The quizzes will be  
given at the beginning of class on Friday, and will cover material from that week's lecture. Quizzes will not be  
distributed to late-arriving students, so please make every effort to arrive on time. Make-up quizzes will be given  
only under extreme circumstances.

Attendance: Please make an effort to attend and arrive promptly for all class meetings. If you must miss a lecture,  
you may download the handout from the course web site or copy a colleague's notes.

Classroom Atmosphere: I strive to develop an atmosphere of mutual courtesy and respect in class, so that everyone  
is comfortable and free to learn. Please help me in this effort by refraining from distracting activities in class like  
reading the newspaper, using electronics, and having side conversations.

Plagiarism: Using another's work or writing without giving credit is one definition of plagiarism. Plagiarism is a  
serious offense and will be dealt with harshly. If you have any questions about plagiarism, feel free to ask the  
instructor.
Assignments, quizzes and exams Summary Table

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Total number</th>
<th>% of total course points each</th>
<th>% of total course points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Comprehensive Exams</td>
<td>2</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Comprehensive Final Exam</td>
<td>1</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Lab Reports</td>
<td>5</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>(drop lowest score)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quizzes</td>
<td>10</td>
<td>1</td>
<td>10</td>
</tr>
</tbody>
</table>

Final grades will be assigned as: 96.7-100 A+, 93.4-96.6 A, 90-93.3% A-, 86.7-90 B+, 83.4-86.6 B, 80-83.3% B-, 76.7-80 C+, 73.4-76.6 C, 70-73.3% C-, 66.7-70 D+, 63.4-66.6 D, 60-63.3% D-, < 60% E

UNIVERSITY OF FLORIDA POLICIES YOU NEED TO KNOW:

Online Course Evaluation Process
Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. These evaluations are conducted online at https://evaluations.ufl.edu. Evaluations are typically open for students to complete during the last two or three weeks of the semester; students will be notified of the specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results.

Academic Honesty
As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.” You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code.

Software Use:
All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.
Services for Students with Disabilities
The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

0001 Reid Hall, 352-392-8565, www.dso.ufl.edu/drc/

Campus Helping Resources
Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university’s counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu/cwc/
  Counseling Services
  Groups and Workshops
  Outreach and Consultation
  Self-Help Library
  Wellness Coaching

- Career Resource Center, First Floor JWRU, 392-1601, www.crc.ufl.edu/
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## Master Schedule – Updated February 12, 2015

<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture Wednesday Period 2-3 (8:30-10:25)</th>
<th>Date</th>
<th>Lab Friday Periods 2-4 (9:15 – 11:30)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 7</td>
<td>Course Introduction; Syllabus; Woody plant structure lecture;</td>
<td>Jan 9</td>
<td>Introduction to labs and How to write a lab report</td>
</tr>
</tbody>
</table>
| Jan 14 | Primary growth | Jan 16 | Lab Exercise 1: Vegetative shoot development  
*Writeup Due January 23*
| Jan 21 | Secondary growth and wood development | Jan 23 | Lab Exercise 2: Lumber biology: stem anatomy  
*Writeup Due January 30*
| Jan 28 | Photosynthesis - Biochemistry | Jan 30 | Lab Exercise 3: Measuring photosynthesis and respiration  
*Writeup Due February 6*
| Feb 4 | Photosynthesis - Biological and environmental controls | Feb 6 | Carbohydrates, respiration |
| Feb 11 | Mineral nutrition and nutrient cycling | Feb 13 |  |
| Feb 18 | Water relations I: water potential; uptake, transport and loss of water | Feb 20 | Water relations II: Control of transpiration; tree and stand water balance  
*Writeup Due March 20*
| Feb 25 | *Flex Day* | Feb 27 | Lab Exercise 4: Water potential  
*Writeup Due March 20*
| Mar 4 | *No Class – UF Spring Break* | Mar 6 | *No Class – UF Spring Break* |
| Mar 11 | Water relations III: Water stress and xylem cavitation | Mar 13 | *No Class – Forestry Club Conclave* |
| Mar 18 | Energy balance | Mar 20 | Lab Exercise 5: Leaf Energy Balance  
*Writeup Due April 3*
| Mar 25 | *Exam 2 (Mineral Nutrition through Energy Balance)* | Mar 27 | Radiation effects on tree morphology and physiology – ONLINE LECTURE – view on course website lecture page |
| Apr 1 | Reproductive Biology, Genetics, and Tree Improvement (John Davis) | Apr 3 | Reproductive Biology, Genetics, and Tree Improvement (John Davis) |
| Apr 8 | Reproductive Biology, Genetics, and Tree Improvement (John Davis) | Apr 10 | Reproductive Biology, Genetics, and Tree Improvement (John Davis) |
| Apr 15 | Reproductive Biology, Genetics, and Tree Improvement (John Davis) | Apr 17 | *Flex Day* |
| Apr 22 | Review for Final Exam  
LAST DAY OF CLASS | | |

### Thursday, April 30

**Comprehensive Final Exam Group 30A**  
7:30 a.m. – 9:30 a.m.  
219 Newins-Ziegler Hall